

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

F(NE)

US Patent Application

09/068,278 July 9, 1998

Art Unit

Filed

3722

Examiner

Erica D. Ergenbright

Telephone

(703) 308-6395 (703) 308-3579

Fax Applicant:

Locher et al.

Attorney Docket:

(R) S11-PC/PC1/US

Mail Stop Petition Commissioner for Patents PO Box 1450

PO Box 1450 Alexandria, VA 22313-1450

Amendment After Final Action

Dear Examiner Ergenbright:

This Amendment After Final Action responds to the Office Action mailed November 22, 2002.

The claims, which were submitted with the Request for Continuing Examination in this case, are set forth on the following pages. The claims have not been further amended in this Amendment After Final Action.

08/17/2003 RMONDAF1 00000095 09068278

03 FC:2253

465.00 OP

RECEIVED

JUN 1 7 2003

OFFICE OF PETITIONS

- 39. (Previously Amended) The apparatus as claimed in claim 88, comprising:

 a pair of tool supports (1,2) for holding at least two tools (3) in pairs, and

 a tool support feed (5) for lateral positioning of at least one of said at least two tools (3a,

 b, c, d) above a first transport path (100) along which a cable (107) whose insulation is to

 be stripped can be inserted in its feed direction, wherein

 said tool support feed (5) is formed for a controlled lateral drive for controlled sideward

 movement of at least one of said pair of tool supports (1,2) to any desired position within

 a working range laterally with respect to said first transport path (100).
- 40 (Previously Amended). The apparatus as claimed in claim 88, wherein said tools have upper and lower positions, comprising a separate tool support feed (5a, b) coordinated with each tool support (1,2) so that said upper and lower positions of said at least two tools (3) can be combined.
- 41 (Original). The apparatus as claimed in claim 39, wherein said pair of tool supports (1b, 2b; 1c, 2c) are held on a common support part (8) and can be displaced together with said common support part (8).
- 42 (Original). The apparatus as claimed in claim 39, wherein said tool supports (1,2) have, in a lateral direction, a plurality of positionable holders for said at least two tools (3), said at least two tools (3) being selectable as required from a group of cable-processing tools.
- 43. (Previously Amended) The apparatus according to claim 42, wherein said group of cable-processing tools consists of at least one of cutting tools, severing tools, clamping tools, marking apparatuses and grinders.

- 44. (Previously Amended) The apparatus as claimed in claim 39, wherein said pair of tool supports (1,2) are continuously adjustable relative to one another in a lateral direction or toward and away from said first transport path (100).
- 45. (Original) The apparatus as claimed in claim 39, wherein said at least two tools (3) are arranged in pairs and comprise at least two pairs of blades.
- 46 (Original). The apparatus as claimed in claim 45, wherein one blade of one pair of said pairs of blades is above said cable and another blade of said one pair of blades is under said cable.
- 47 (Original). The apparatus as claimed in claim 39, wherein said tool support feed (5) comprises at least one motor and a programmable microprocessor for control of said at least one motor.
- 48 (Original). The Apparatus as claimed in claim 39 wherein said tool support feed (5) comprises a cable absence sensor.
- 49 (Original). The apparatus as claimed in claim 47, wherein a plurality of tool support feeds (5) holding a plurality of tool supports (1,2) are arranged along said first transport path (100).
- 50 (Withdrawn). A continuous cable processing apparatus, comprising:

 a pair of tool supports (1,2) for holding at least two tools (3) in pairs, and

 a tool support feed (5) for positioning of at least one of said at least two tools (3a, b, c, d)

 in a direction perpendicular to the working direction of said at least one of said two tools,

 across a first transport path (100), along which a cable (107) whose insulation is to be

 stripped can be inserted in its feed direction, wherein

 an encoder (41) is arranged on an adjuster (14) for tool setting and monitors movement of
 said adjuster (14) in an operating state in order to perform at least one of the following: to

detect completed closure of said at least one of said at least two tools (3), to stop said drive movement, to calibrate and to initialize said drive or said encoder.

- 51 (Withdrawn). A cable processing apparatus according to claim 91, wherein connection between said drive (23;16) and said spindle (14) is elastic.
- having tool holders and insertable tools, having at least the following steps:

 employing a monitor that monitors an open state of said tool holders (1) or tools (3) and reduces a drive force of a drive motor (23; 16) shortly before closing said tool holders or tools, so that said drive motor brings said tool holders into a closed position with slight force.
- for longitudinal transport of a cable along a transport path (100), wherein said rollers (A, B; 111) or continuous belts (C; 112) are located opposite one another across said transport path (100) and are adjustable relative to one another and can be opened and closed in a cable-dependent and feed-controlled manner and can be moved together lateral to said transport path.
- 54 (Withdrawn). Apparatus as claimed in claim 53, wherein a cable is receivable in a gap between opened rollers (A, B; 111) or belts (C, 112) and is transported onward by means of said rollers (111) or said belts (112) that are moved toward one another and held against one another under a contact pressure.
- 55 (Withdrawn). Apparatus as claimed in claim 53, wherein said rollers (111) or said belts (112) belonging to two pairs of rollers or belts (A, B; 111; C; 112), are programmably adjustable relative to one another by at least one of stepping motors, a control, a

programmable circuit, and at least one pressure sensor for measuring or evaluating contact pressure on said cable (107).

- 56 (Withdrawn). A cable apparatus as claimed in claim 53, further comprising a control member having a computer which, in an operating state, after input of cable diameter, cable type designation, and desired insulation stripping length, automatically calculates and sets at least one of an initial gap of said rollers or belt drive (A, B; 111; C; 112) and a contact pressure for stripping of insulation sections, and appropriately controls said drives.
- 57 (Withdrawn). A continuous cable processing apparatus having drive and processing stations, wherein a common baseplate and a front plate is provided, on which at least one of drive, feed, tool holders, and measuring or marking modules can be provided in a mountable manner at predetermined positions along a cable transport path and wherein at least one of said modules has its own front plate, independent from other said front plate(s).
- 58 (Withdrawn). The apparatus as claimed in claim 57, wherein at least one of pairs of continuous belts (112) or rollers (111) of said feed module can be removed without replacement or can be replaced by at least one of drive rollers (111) or pairs of continuous belts (112), or a continuous belt pair module (C) can be replaced by roller modules (A, B), and vice versa.
- 59 (Withdrawn). A continuous cable processing apparatus having drive and processing stations, with at least one moveable guide (40, 21) associated with a processing station (3), wherein said guide (40, 21) is connected to a control that alternatively moves said guide completely from a cable transport path (100) during a cable processing mode.

- 60. (Withdrawn). The apparatus as claimed in claim 59, wherein at least one guide (40, 21) is arranged on that side of said processing station which faces a cable outlet.
- 61 (Withdrawn). The apparatus as claimed in claim 59, wherein said guide (40, 21) is raisable in a radial plane relative to said cable transport path.
- 62 (Withdrawn). The apparatus as claimed in claim 59, wherein one guide (40) each, is arranged in front of and behind said processing station (3),.

A process for controlling a continuous cable insulation stripping

- apparatus, comprising:

 employing a program that contains a control for controllable driving of said apparatus,
 said program comprising program steps coordinated with individual process steps,
 combining a plurality of such program steps to form groups of operations, in which a step
 sequence is predetermined and control parameters of at least one step are selectable or
 adjustable, and
 calling up groups of operations to trigger a plurality of program steps that are
 preprogrammed in such a manner as result in control of drives in step sequence.
- 64 (Withdrawn). The process as claimed in claim 63, wherein at least one of an individual program, process steps and control parameters linked therewith is set to at least one of none and desired other parameters via an input unit.
- 65. (Withdrawn). The process as claimed in claim 63, wherein a plurality of program groups are combined to form overlapping program groups, and wherein individual program groups are shown as an overview and subsequently in detail on a display, said display permitting interactive correction of given values in individual program steps.

63 (Withdrawn).

- 66. (Withdrawn) A continuous cable insulation stripping apparatus, comprising along a first transport path definable by a cable axis,
 - a cable transport apparatus, which comprises at least one first and at least one second transporters (A, B; C; 111, 112, 113) for linear transport and holding of a cable (107) along said first transport path,

at least one blade station (E, F, G; 115) for holding at least one blade to be moved toward said cable axis along a working direction for processing said cable (107), said blade station (E, F, G; 115) being arranged between two of said transporters (A, B; C, 111, 112, 113) and, before and after processing of said cable (107), said transporters holding at least one of said cable and one each of cable end regions (107a, b) facing one another and created by said blade station, parallel to said first transport path (100) and so as to be movable in a cable longitudinal direction, wherein at least one of said blade station (E, F, G, 115) and said transporter (A, B; C. 111, 112, 113) is displaceable approximately at right angles or at right angles to said first transport path (100) and perpendicular to said working direction of said blade by a drive.

- 67. (Withdrawn) Apparatus as claimed in claim 66, wherein displaceablility of one or more transporters (A, B; 112, C, 113) permits parallel displacement of at least one of said cable (107) and at least one cable end (107a, b) from said first transport path (100) to at least a second transport path (102, 103) and wherein a further processing station (16, 17) can be coordinated with said second transport path (102, 103).
- 68. (Withdrawn) The apparatus as claimed in claim 67, wherein said further processing station comprises at least one transport or processing station (16, 17), selected from the group consisting of an insulation stripping station, a sawing station, a cutting station, a

- twisting station, a shaping station, a crimping station, a soldering station, a cable processing station and a manipulator arm.
- 69. (Withdrawn) The apparatus as claimed in claim 67, wherein at least one transporter (A, B; 4; C, 112, 113), is guided in a linear guide (110) transversely to said transport path (100) and can be moved by a drive apparatus (111,114).
- 70. (Withdrawn) The apparatus as claimed in claim 69, wherein said transporter is located one each on both sides of said blade station (E, F, G, 115).
- 71. (Withdrawn) The apparatus as claimed in claim 67, wherein a drive apparatus (111, 114) of each movable transporter (112, 113) and at least one independent transport drive is connected to a common control (200), and at least one further processing station (16, 17), so that all longitudinal and transverse movements can be performed in a coordinated and time-optimized manner, in synchronization with the processing steps.
- 72. (Withdrawn) The apparatus as claimed in claim 71, wherein said transport drive is located one each on both sides of said blade station (E, F, G, 115) and said common control (200) also controls said blade station (E, F, G, 115).
- 73. (Withdrawn) The apparatus as claimed in claim 67, wherein two transporters (112) are connected to one another by a common motor-controlled actuator (101) so that, transverse adjustment of one transporter (112a) results in a diametrically opposite lateral adjustment of the other transporter (112b).
- 74. (Withdrawn) The apparatus as claimed in claim 67, wherein at least one transporter (112b) is connected to at least one of said blade station (115 and tool support by a common, motor-controlled actuator (10[41) so that transverse adjustment of one

- transporter (112b) results in a diametrically opposite transverse adjustment of at least one of said blade station (115) and said tool support.
- 75. (Original) The apparatus as claimed in claim 39, wherein the processing station comprises at least one rotatable blade or a second processing station having a rotatable blade (030), whose axis of rotation is along at least one transport path.
- 76. (Previously Amended) A process for stripping insulation of a cable (107) using an apparatus as claimed in claim 75 having at least the steps of:

 holding a cable (107) in a centered manner on at least two sides of the cable, during incision with the blade (030), and

 arranging at least one holding point in an immediate vicinity of said blade (030)
- 77. (Previously Amended) The process as claimed in claim 76, wherein at least one of said clamping and centering apparatus (A, B; 111, C, 112; 013) comprise jaws which lie in a plane, each of said jaws have a retaining surface, which retaining surfaces are approximately perpendicular to a radial plane with the cable (107) and are formed in such a way that fully closing of said centering jaws (A, B; 111; C, 112; 013) is possible.
- 78. (Previously Amended) The apparatus as claimed in claim 75, wherein a cutting apparatus comprises at least two blade jaws (030) which lie in a plane, each having a cutting edge, which cutting edges are formed at least approximately parallel to one tangential plane of a cable (107) and can be fully closed and can be advanced to give different initial contact points on a cable sheath, depending on cable diameter.
- 79. (Original) The apparatus as claimed in claim 75, wherein said blade station, and at least one centering clamping apparatus (A, B; 111, C; 112. 013) are in a form of an automatic

processing module (057) which is removably mounted on a continuous cable processing machine (058).

- 80. (Original) The apparatus as claimed in claim 79, wherein said module (057) is connected to a frame of said continuous cable processing machine (058) by a hinge (059) so that said machine can be swiveled out of an axial working position inclined relative thereto.
- 81. (Previously Amended) The apparatus as claimed in claim 77, wherein said centering jaws (013) are L-shaped in section with retaining surfaces that provide a broad centering surface for a cable sheath and ends that project directly adjacent to said blade (030).
- 82. (Previously Amended) The apparatus as claimed in claim 78, wherein, for controlling said rotatable blades (030) across said first transport path (100), displaceable rods (060) are provided which have, in a region of said blade holders (015), wedge surfaces (016) which cooperate with diametrically opposite formations of said blade holder (015), said rods (060) coming into contact at another end with a wedge strap (018) which is displaceable along said transport path (100) by nonrotatable actuators (061).
- 83. (Withdrawn) The apparatus as claimed in claim 66, wherein said first and second transporter (A, B; C: 112, 113) have at least one of one pair of rollers (A, B; 111) and one pair of continuous belts (C; 112).
- 84. (Previously Amended) The apparatus as claimed in claim 39, wherein at least one of an upper and a lower roller (111), continuous belts (112) of a pair of rollers, a pair of continuous belts, respectively, and upper and lower tool holders (1) are each displaceable transversely with respect to said first transport path (100), relative to an opposite part in each case, so that a twisting procedure can be performed on a cable (107) lying in between.

- 85. (Original) The apparatus as claimed in claim 39, wherein a guide apparatus (9) which can be swiveled at least one of laterally and upward or downward is provided to increase insulation stripping lengths, in order to enable a cable (107) already lying on another side of said tool (3) to be moved back against a feed direction without collision.
- 86. (Withdrawn) The apparatus as claimed in claim 39, having a cable processing station and tool holders, comprising:
 a monitoring member which monitors an open state of said tool holders (1) and reduces a drive force of a drive motor (23; 16) shortly before closing of said tool holders, to bring said tool holders into a closed position with slight force.
- 87. (Previously Amended) A cable processing apparatus as claimed in claim 39 having a first and a second belt drive for a cable feed, wherein a gripping apparatus is coordinated with said second belt drive (112b); said second belt drive (112b) releasing said cable (107) so that said cable (107) can be removed by said gripping apparatus.
- 88. (Previously Amended) A continuous cable insulation stripping apparatus comprising at least one tool, at least one tool support, and a positioner that relatively positions the at least one tool support in a direction perpendicular to a working direction of the at least one tool wherein said positioner positions said at least one tool support to more than two positions.
- 89. (Previously Amended) The apparatus as claimed in claim 44, wherein said tool supports are adjustable toward and away from said first transport path (100).
- 90. (Original) The cable insulation stripping apparatus as claimed in claim 44, wherein said tool supports (1,2) are adjustable independently of one another.

- 91. (Withdrawn) The cable processing apparatus according to claim 50, wherein said adjuster comprises an adjusting spindle.
- 92. (Withdrawn) The cable processing apparatus according to claim 50, wherein said adjuster adjusts as a function of drive movement of a drive (23; 16) by comparison with a comparable encoder value of said drive (23; 16) on said encoder.
- 93. (Withdrawn) Apparatus according to claim 51, wherein said connection comprises a coupling via a toothed belt (24).
- 94. (Withdrawn) Apparatus as claimed in claim 54, in which said gap is computer controlled.
- 95. (Withdrawn) Apparatus as claimed in claim 55, in which said control has an automatic reset.
- 96. (Withdrawn) Apparatus as claimed in claim 57, in which said modules are exchangeable.
- 97. (Withdrawn) The apparatus as claimed in claim 59, wherein one drive station each are arranged in front of and behind said processing station.
- 98. (Withdrawn) The apparatus according to claim 62, in which said guides are arranged symmetrically with respect to said processing station.
- 99. (Withdrawn) The apparatus according to claim 97, in which said drive station is arranged symmetrically with respect to said processing station.
- 100. (Previously Amended) The apparatus according to claim 88, wherein displaceability of one or more transporters (A, B; 112, C, 113) permits parallel displacement of at least one of said cable (107) and at least one cable end (107a, b) from said first transport path (100)

to at least a second transport path (102, 103), and wherein a processing station (16, 17) can be coordinated with said second transport path (102, 103).

- 101. (Original) The apparatus according to claim 100, wherein said further processing station comprises at least one transport or processing station (16, 17), selected from the group consisting of an insulation stripping station, a sawing station, a cutting station, a twisting station, a shaping station, a crimping station, a soldering station, a cable processing station and a manipulator.
- 102. (Previously Amended) The apparatus according a claim 100, wherein at least one of the transporters (A, B; 4; C, 112, 113) is guided in a linear guide (110) transversely to said transport path (100) and can be moved by a drive apparatus (111, 114).
- 103. (Previously Amended) The apparatus according to claim 100, wherein the one or more transporters are located on both sides of said blade station (E, F, G, 115).
- 104. (Previously Amended) The apparatus as claimed in claim 100, wherein a drive apparatus (111, 114) of each movable transporter (112, 113) and at least one independent transport drive, is connected to a common control (200), and the processing station (16, 17), so that all longitudinal and transverse movements can be performed in a coordinated and time-optimized manner, in synchronization with the processing steps.
- 105. (Original) The apparatus as claimed in claimed 100, wherein transport drives are located on both sides of said blade station (E, F, G, 115) and said common control (200) also controls said blade station (E,F, G, 115).
- 106. (Previously Amended) The apparatus as claimed in claim 100, wherein two of the transporters (112) are connected to one another by a common motor-controlled actuator

- (101) so that transverse adjustment of one transporter (112a) results in a directly opposite lateral adjustment of the other transporter (112b).
- 107. (Previously Amended) The apparatus as claimed in claim 100, wherein at least one of the transporters (112a) is connected to at least one of said blade station (115) and tool support by a common, motor-controlled actuator (101).
- 108 (Original). The apparatus as claimed in claim 100, wherein the processing station comprises at least one rotatable blade or a second processing station having a rotatable blade (030), whose axis of rotation is along at least one transport path.
- 109. (Previously Amended) A process for stripping insulation of a cable (107) using an apparatus as claimed in claim 108, having the steps of holding a cable (107) in a centered manner on at least two sides of the cable during incision with the blade (030), and arranging at least one holding point in an immediate vicinity of said blade (030).
- 110. (Original) The process for stripping insulation of a cable (107) as claimed in claim 77, having the step of coupling a blade drive with a clamping drive for a clamping and centering apparatus.
- 111. (Previously Amended) The process for stripping insulation of a cable (107) as claimed in claim 110, wherein said clamping drive is separate from said blade drive.
- 112. (Original) The process for stripping insulation of a cable (107) as claimed in claim
 111, having the step of holding at least one of a transporter and centering apparatus nonrotationally.
- 113. (Previously Amended) The process for stripping insulation of a cable (107) as claimed in claim 111 having the step of holding said centering apparatus (111,112) nonrotationally closest to said blade.

- 114. (Withdrawn) The apparatus as claimed in claim 58, wherein said drive rollers are coated.
- 115. (Original) The apparatus as claimed in claim 88, further comprising a transporter with two transport parts that are movable symmetrically to said transport path.
- 116. (Previously Amended) The apparatus as claimed in claim 77, wherein said processing station comprises at least two blade jaws (030) which lie in a plane, each having a cutting edge, which cutting edges are formed at least approximately parallel to one tangential plane each of a cable (107) and can be fully closed and can be advanced to give different initial contact points on a cable sheath, depending on cable diameter.
- 117. (Original) The apparatus as claimed in claim 88, wherein at least one of an upper and a lower roller (111), continuous belts (112) of a pair of rollers, a pair of continuous belts, respectively, and upper and lower tool holders (1) are each displaceable transversely with respect to said transport path (100), relative to an opposite part in each case, so that a twisting procedure can be performed on a cable (107) lying in between.
- 118. (Original) The apparatus as claimed in claim 88, wherein a guide apparatus (9) which can be swiveled at least one of laterally and upward or downward is provided to increase insulation stripping lengths, in order to enable a cable (107) already lying on another side of said tools (30) to be moved back against a feed direction without collision.
- 119. (Withdrawn) The process as claimed in claim 86, having at least the step of detecting said closed position by virtue of an encoder associated with said drive motor (23; 16) that loses its steps of rotational movement notwithstanding drive energy.
- 120. (Previously Amended) A continuous cable insulation stripping apparatus as claimed in claim 88, having a first and a second belt drive for a cable feed wherein a gripping

apparatus is coordinated with said second belt drive (112b), said second belt drive (112b) releasing said cable (107) so that said cable (107) can be removed by the gripping apparatus.

- 121. (Previously Amended) The apparatus as claimed in claim 39, further comprising a computer that controls said sideward movement of said at least one tool support.
- 122. (Original) The apparatus as claimed in claim 88, further comprising a cable absence sensor.
- 123. (Previously Amended) The apparatus as claimed in claim 88, wherein said tool, said at least one tool support and said positioner are within one module.
- 124. (Withdrawn) A process as claimed in claim 52, further comprising detecting said closed position of said tool holders or tools by virtue of an encoder (41) connected to or integrated with said drive motor (23; 16) that looses its steps of rotary movement notwithstanding a supply of drive energy, or comes to a stop notwithstanding a supply of drive energy.
- 125. (Previously Amended) The apparatus according to claim 88, comprising a continuous cable processing apparatus having rollers or continuous belts for longitudinal transport of a cable along a transport path (100), wherein said rollers (A, B; 111) or continuous belts (C; 112) are located opposite one another across said transport path (100) and are adjustable relative to one another and can be opened and closed in a cable-dependent and feed-controlled manner and can be moved together lateral to said transport path.
- 126. (Withdrawn) A continuous cable processing apparatus having rollers or continuous belts for longitudinal transport of a cable along a transport path (100), wherein said rollers (A, B; 111) or continuous belts (C; 112) are located opposite one

another across said transport path (100) and are adjustable relative to one another and can be opened and closed in a cable-dependent and feed-controlled manner and can be moved together lateral to said transport path, further comprising a control member having a computer which, in an operating state, after input of cable diameter, cable type designation, and desired insulation stripping length, automatically calculates and sets at least one of an initial gap of said rollers or belt drive (A, B; 111; C; 112) and a contact pressure for stripping of insulation sections, and appropriately controls said drives.

- 127. (Withdrawn) A continuous cable processing apparatus having rollers or continuous belts for longitudinal transport of a cable along a transport path (100), wherein said rollers (A, B; 111) or continuous belts (C; 112) are located opposite one another across said transport path (100) and are adjustable relative to one another and can be opened and closed in a cable-dependent and feed-controlled manner and can be moved together lateral to said transport path, wherein said rollers (111) or said belts (112) belonging to two pairs of rollers or belts (A, B; 111; C; 112), are programmably adjustable relative to one another by means of at least one of stepping motors, a control, a programmable circuit, and at least one pressure sensor for measuring or evaluating contact pressure on said cable (107).
- 128. (Withdrawn) A continuous cable processing apparatus, comprising
 a program that contains a control for controllable driving of said apparatus, said program
 comprising program steps coordinated with individual process steps,
 a plurality of such program steps being combined to form groups of operations, in which
 a step sequence is predetermined and control parameters of at least one step are selectable
 or adjustable.

said groups of operations being called up to trigger a plurality of program steps that are preprogrammed in such a manner as to result in control of drives in step sequence.

129. (Withdrawn) The apparatus as claimed in claim 126, wherein at least one of an individual program, process steps and control parameters linked therewith in set to at least one of none and desired other parameters via an input unit.

130. (Withdrawn) The apparatus as claimed in claim 126, wherein a plurality of program groups are combined to form overlapping program groups, and wherein individual program groups are shown as an overview and subsequently in detail on a display, said display permitting interactive correction of given values in individual program steps.

The patents to Wollermann and Koch do not disclose the above features of independent claim 88.

In Wollermann, the <u>cable</u> is moved to more than two positions in a direction perpendicular to a working direction of the at least one tool - <u>but not the tool</u>. This is a significant difference from the present invention. In Wollermann, one needs <u>many different</u> tools and drives for each different tool, whereas the present invention has <u>only one drive for all</u> tools on the tool support. Nonetheless, the present invention can do many different operations on the one cable (as Wollermann does).

The combination of Wollermann and Koch does not bring their disclosures closer to the present invention as described in independent claim 88.

Wherefore, independent claim 88 is not anticipated by Wollermann or made unpatentable by Koch together with Wollermann.

Applicant restates the claim of priority of Swiss Application 3235. In discussions with Ms. Wellington, she acknowledged receipt of the Swiss priority claim documentation previously submitted. We again enclose a corrected version of PCT/EP97/05216. The text written in by hand is merely an English translation of what is stated in German. This corrected version (Field 63) was issued by the PCT Office. The corrected version states that "PCT/EP97/05216 application is a (CIP) Continuation-in-Part or continuation of the earlier application PCT/EP96/04790", filed November 4, 1996. The copy of the corrected version of PCT/EP97/05216 shows that PCT/EP97/05216 was filed in the US as a CIP of PCT/EP96/04790, which claims the priority of Swiss Application 3235 filed November 6, 1995 as shown in Attachment A, which is the cover sheet for PCT/EP96/04790. This demonstrates

that claiming priority of Swiss Application 3235 filed November 6, 1995 is appropriate for the present invention.

Wherefore Applicant respectfully requests allowance of independent claim 88 and the claims depending on it.

A three-month extension of time in which to respond to the outstanding Office Action is hereby requested. A Notice of Appeal is also enclosed. PTO-2038 authorizing credit card payment for the amount of \$465 is enclosed for the prescribed Small Entity three-month extension fee and the \$160 Notice of Appeal fee, for a total of \$620. Any other fee due by virtue of this filing or this application should be charged to Deposit Account 11-0665. Any refunds in connection with this filing should be credited to Deposit Account 11-0665. A duplicate of this page is enclosed for this purpose.

This Amendment After Final Action is necessary to place the claims in better condition for allowance or appeal.

In a separate document submitted with this Amendment After Final Action, we have submitted a Petition to Revive the present application for Unavoidable Abandonment.

M. Robert Kes tes, becase

M. Robert Kestenbaum

Reg. No. 20,430

11011 Bermuda Dunes NE

Albuquerque, NM USA 87111

Telephone (505) 323-0771

Facsimile (505) 323-0865

I hereby certify this correspondence is being deposited with the US Postal Service as Express Mail in an envelope with sufficient postage to PO Box 1450, Commissioner for Patents, Alexandria, VA 22313-1450 on June 13, 2003, Express Mail Label No. EU964783945US.

M. Robert Kister, become

(R) S-11 US 09/068,278 Locher



PCT WELTORGANISATION FÜR GEISTIGES EIGENTUM
INTERNATIONALE ANMELDUNG VERÖFFENTLICHT NACH DEM VERTRAG ÜBER DIE

INTERNATIONALE ZUSAMMENARBEIT AUF DEM GEBIET DES PATENTWESENS (PCT)

(51) Internationale Patentklassifikation 6:

H02G 1/12

(11) Internationale Veröffentlichungsnummer: WO 97/17751

(43) Internationales

Veröffentlichungsdatum:

15. Mai 1997 (15.05.97)

(21) Internationales Aktenzeichen:

PCT/EP96/04790

A1

(22) Internationales Anmeldedatum: 4. November 1996 (04.11.96)

(30) Prioritälsdaten:

3235/95

6. November 1995 (06.11.95) CH

(71) Annelder (für alle Bestimmungsstaaten ausser US): SCHLEU-NIGER HOLDING AC [CH/CH]; Cluz-Blowheim-Sumse

3. CH-4502 Solothum (CH).

(72) Erfinder; und

(75) Erfinder/Ammelder (nur für US): LOCHER, Beat [CH/CH]; Schleuniger AG, Bierigutstrasse 9, CH-3608 Thm (CH).

(74) Anwalt: PATENTBÜRO BÜCHEL & PARTNER AG; Letzanaweg 25-27, FL-9495 Triesen (LI).

(81) Besthmanungsstaaten: BR, JP, KR. US. europäisches Patent (AT, BE, CH, DE, DK, ES, FJ, FR, GB, GR, IE, IT, LU, MC. NL, PT, SE).

Veröffentlicht

Mit internationalem Recherchenbericht.

Certified washed

(54) Title: INSULATION STRIPPING DEVICE

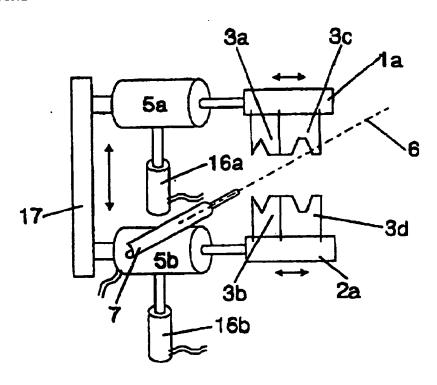
(54) Bezeichnung: ABISOLIERVORRICHTUNG

(57) Abstract

The invention concerns a novel insulation stripping device with continuously adjustable tool carriers (1, 2) disposed perpendicular relative to the cable feed direction such that a plurality of tools (3) can be placed in any positions so that any work can be carried out on cables (7). The invention further concerns various novel methods and improved devices.

(57) Zusammenfassung

Die Erfindung betrifft eine neuertige Abisoliervarrichtung mit stufenlos verstellbaren Werkzeuginigern (1, 2) senkrecht auf die Kabelvorschubrichtung, dass mehrere Werkzeuge (3) beliebig positionierbar sind und derart Kabel (7) universell bearbeitet werden können. Verschiedene neue Verfahren und verbesserte Vorrichtungen sind ergänzend angegeben.



WELTORGANISATION FÜR GEISTIGES EIGENTUM Integnationales Büro

INTERNATIONALE ANMELDUNG VERÖFFENTLICHT NACH DEM VERTRAG ÜBER DIE INTERNATIONALE ZUSAMMENARBEIT AUF DEM GEBIET DES PATENTWESENS (PCT)

(51) Internationale Patentklassifikation 6:

H01R 43/05, H02G 1/12

(11) Internationale Veröffentlichungsnummer:

WO 98/13907

A1

(43) Internationales

2. April 1998 (02.04.98)

(21) Internationales Aktenzeichen:

PCT/EP97/05216

(22) Internationales Anmeidedatum:

23. September 1997

(23.09.97)

>(30) Prioritätsdaten:

2329/96 PCT/EP96/04790 23. September 1996 (23.09.96) 4. November 1996 (04.11.96)

. (34) Länder für die die regionale oder

internationale Anmeldung eingereicht

worden ist:

BR naw.

(63) Fortsetzung (CON) oder Teilfortsetzung (CIP) der früheren Anmeldung

Angemeldet am

PCT/EP96/04790 (CIP) 4. November-1996 (04.1-1.96)

(71) Anmelder (für alle Bestimmungsstaaten ausser US): SCHLEU-NIGER HOLDING AG [CH/CH]; Glutz-Blotzheim-Strasse 3, CH-4502 Solothum (CH),

(72) Erfinder; und

(75) Erfinder/Anmelder (nur für US): LOCHER, Beat [CH/CH]; Bleriguestrasse 9, CH-3608 Thun (CH). STEPAN, Jiri [CH/CH]; St. Gallerstrasse 76, CH-9320 Sargans (CH).

Veröffentlichungsdatum: (74) Anwalt: ROSENICH, Paul; Patentbüro Büchel & Partner AG.

Letzanaweg 25-27, FL-9495 Triesen (LI).

(81) Bestimmungsstaaten: BR, JP, KR, US, europäisches Patent (AT. BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).

Veröffentlicht

Mit internationalem Recherchenbericht. Vor Ablauf der für Änderungen der Ansprüche zugelassenen Frist. Veröffentlichung wird wiederholt falls Änderungen eintreffen.

(54) Title: CONTINUOUS CABLE PROCESSING DEVICE

(54) Bezeichnung: ENDLOSKABELBEARBEITUNGSVORRICHTUNG

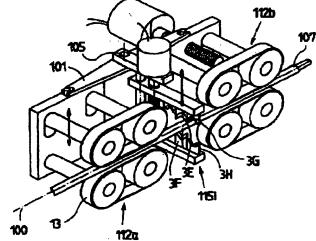
(57) Abstract

The invention concerns a continuous cable processing device to produce cable sections (107a, b) with processed ends having a cable feeding device with at least one transporting device (A, B; C; 111; 112, 113) to move and hold the cable (107) in an axial direction and crosswise to it a cutting station (E, F, G, 115). According to a special variant, two transporting devices (A, B; C; 111; 112, 113) are placed on both sides of the cutting station (E, F, G, 115) running in the longitudinal direction of the cable, each of them holding the resulting respective end sections of the cable (107 a, b) in its same direction and in a movable position after the cable has been cut (107). At least one of the end processing stations (16, 17) is placed alongside the transporting device (A, B; C; 111; 112, 113) running crosswise with respect to the direction of the cable and allowing it to move, so that one end section of the cable can be inserted in the end processing station (16. 17).

(57) Zusammenfassung

Eine Endloskabeibearbeitungsvorrichtung zum Erzeugen von Kabelteilstücken (107a, b) mit bearbeiteten Enden umfasst eine Kabelfördervorrichtung mit zumindest einer

1120 Transporteinrichtung (A, B; C; 111; 112, 113) zum Bewegen und Halten des Kabels (107) in axialer Richtung und quer dazu eine Messerstation (E. F. G. 115). Gemäss einer speziellen Variante sind zwei Transporteinrichtungen (A. B. C; 111; 112, 113) in Kabellängsrichtung beidseits der Messerstation (E. F. G. 115) angeordnet und halten nach dem Durchtrennen des Kabels (107) je einen der beim Trennen erzeugten Kabelendbereiche (107a, b) in Kabellängsrichtung bewegbar. Zumindest eine dieser Endbearbeitungsstationen (16, 17) ist quer zur Kabellangsrichtung neben der Messerstation (E. F. G. 115) angeordnet und zumindest eine Transporteinrichtung (A. B. C. 111; 112, 113) ist quer zur Kabellängsrichtung bewegbar, so dass ein Kabelendbereich der Endbearbeitungsstation (16, 17) zuführbar ist.



*(Sizhe PCT Gazztte Nr. 38/1998, "Section II")

24 Sep/sep 1998

PCT Gazette - Section II - Gazette du PCT

13765

SECTION: II

NOTICES AND INFORMATION RELATING TO PUBLISHED INTERNATIONAL APPLICATIONS AND/OR ENTRIES IN SECTION 1

RECEIVED

OCT 0 2 2003

NOTIFICATIONS ET INFORMATIONS RELATIVES AUX DEMANDES INTERNATIONALES PUBLIÉES ET/OU AUX RUBRIQUES DE LA SECTION I

OFFICE OF PETITIONS

CORRECTED VERSIONS OF PAMPHLET FRONT PAGES VERSIONS CORRIGÉES DE PAGES DE COUVERTURE DE BROCHURES

Corrected front pages of pamphlets, identified below by their international publication number, have been published on the same date as the present issue of the PCT Gazette. Des versions corrigées des pages de couverture des brochirres, identifiées et dessous per leur numéro de publication internationale, ont été publiées à la date de parution du présent numéro de la Gazette du PCT.

International Publication Numbers Numéros de publication internationale	International Application Numbers Numéros des demandes internationales	Corrections
WO 98/12979	PCT/US97/17286	
WO 98/12987	PCT/US97/17021	
WO 98/13015	PCT/US97/16339	
WO 98/13024	PCT/GB97/02665	
WO 98/13058	PCT/US97/17229	
WO 98/13071	PCT/US97/17044	
WO 98/13119	PCT/US97/17167	
WO 98/13150	PCT/US97/16940	
WQ 98/13212	PCT/US97/16839	add INID Number (63) "Related by continuation (CON) or continuation-
WO 98/13222	PCT/US97/17235	in-part (CIP) to earlier application" which was insovertently omitted
WO 98/13295	PCT/US97/17758	from the front page
WO 98/13296	PCT/US97/18156	
WO 98/13297	PCT/US97/16811	ajouter le numéro INID (63) "Apparenté(e) par continuation (CON) ou
WO 98/13301	PCT/US96/15374	par continuation partielle (CIP) à un brevet autérieur" ornis de la page de
WO 98/13319	PCT/US97/17191	converture par inadvertance
WO 98/13353	PCT/US97/17395	
WO 98/13377	PCT/AU97/00640	
WO 98/13380	PCT/US97/17362	
WO 98/13419	PCT/US97/16756	
WO 98/13484	PCT/US97/17175	
WO 98/13485	PCT/US97/17302	
WO 98/13494	PCT/US97/17382	
WO 98/13498	PCT/US97/17600	

(Continued on the following page)

(Suite sur la page suivante)

13766

PCT Gazette - Section II - Gazette du PCT

24 Sep/sep 1998

CORRECTED VERSIONS OF PAMPHLET FRONT PAGES (Continued)

VERSIONS CORRIGÉES DE PAGES DE COUVERTURE DE BROCHURES (Suite)

International Publication Numbers Numéros de publication internationale	International Application Numbers Numéros des demandes internationales	Corrections
WO 98/13511 WO 98/13516 WO 98/13519 WO 98/13526 WO 98/13573 WO 98/13591 WO 98/13685 WO 98/13716 WO 98/13721 WO 98/13721 WO 98/13723 WO 98/13753 WO 98/13753 WO 98/13757 WO 98/13782 WO 98/13782 WO 98/13834 WO 98/13834 WO 98/13834 WO 98/13834 WO 98/13834 WO 98/13834 WO 98/14056 WO 98/14057 WO 98/14057 WO 98/14057 WO 98/14057 WO 98/14133 WO 98/14134 WO 98/14172 WO 98/14172 WO 98/14175 WO 98/14175 WO 98/14295 WO 98/14295 WO 98/14299 WO 98/14391 WO 98/14403	PCT/US97/17049 PCT/US97/17049 PCT/US97/17429 PCT/US97/17129 PCT/US97/17338 PCT/US97/17330 PCT/US97/17217 PCT/US96/15386 PCT/US97/17366 PCT/US97/17264 PCT/US97/17261 PCT/US97/17339 PCT/US97/17339 PCT/US97/17389 PCT/US97/17419 PCT/US97/17419 PCT/US97/17419 PCT/US97/17404 PCT/US97/16810 PCT/US97/17534 PCT/US97/17534 PCT/US97/17534 PCT/US97/17534 PCT/US97/17537 PCT/US97/17838 PCT/US97/17838 PCT/US97/17810 PCT/US97/17838	add INID Number (63) "Related by continuation (CON) or continuation-in-part (CIP) to earlier application" which was inadvertently omitted from the front page sjouter le numéro INID (63) "Apparenté(e) par continuation (CON) ou par continuation partielle (CIP) à un brevet antérieur" omis de la page de converture par inadvertance
WO 98/14407 WO 98/14415 WO 98/14417	PCT/US97/17901 PCT/US97/18079 PCT/US97/17844	